

obscurely lobed, round or truncate at base, nerves prominent beneath, grey tomentose above and more so beneath; petiolules 2-5 mm long, tomentose; stipels minute, subulate, tomentose. Flowers in axillary racemes; peduncles 10.5-20.5 cm long, tomentose; bracts and bracteoles minute, tomentose, caducous, Calyx green tomentose, tube nearly as long as lobes; upper 3 lobes shorter than lower 2, narrowly deltoid, acuminate. Corolla purple, upto 1.5 cm long; wing petals deeply coloured, longer than vexillum and keel; vexillum reflexed, keel incurved. Stamens 9+1, vexillary stamen free; style incurved at right angle, bearded on the adaxial side below the capitate stigma. Fruits nearly terete, beaked, upto 7 cm long, grey tomentose, valves twisting after dehiscence. Seeds dark brown, upto 3 mm long, more than 1 mm broad.

This is a tropical American species now widely cultivated in parts of Africa (Kenya, Malawi, Zambia, South Africa and Zimbabwe); New South Wales and Queensland in Australia and Hong Kong in Asia. It was found growing

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in the fodder grass plot of Tamil Nadu Agricultural University, Coimbatore and probably came as an impurity with some other seeds. An allied species, *M. bracteatum* (Nees & Mart.) Verdc. is also found near Waltair in Andhra Pradesh. (Information kindly furnished by Dr. G. Panigrahi from Kew Herbarium.)

The typical characters of the genus *Macropitilium* (Benth.) Urb. are squarish hooked style; wings rounded and longer than vexillum and keel; stipules not produced below the base.

Specimens examined: Farm of Tamil Nadu Agricultural University, Coimbatore, 487 m, 20-8-1974, *Marudan* 39285, in flowers and fruits.

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S. V. SUBBA RAO
R. GOPALAN

29. ADDITIONS TO THE FLORA OF RAJASTHAN

During the course of identification of plants collected from Bhilwara and Jodhpur districts of Rajasthan, I came across the following species which were not recorded earlier from Rajasthan. All the specimens cited in the paper are deposited in the herbarium of Arid Zone Circle, Botanical Survey of India, Jodhpur (BSJO).

Alysicarpus heterophyllus (Baker) Jafri & Ali,

in *Biologia* 12: 33. 1966; Ali, in *Fl. W. Pak.* 100. 343. 1977; *A. vaginalis* var. *heterophyllus* Baker, in Hook. f., *Fl. Br. Ind.* 2: 158. 1879.

An erect or diffuse annual herb upto 45 cm, in moist sandy soil amidst grasses. Stem slightly angular, puberulous. Leaves stipulate, 1-3, foliolate intermixed. Leaflets 0.5-4.5 × 0.2-1 cm, lanceolate, oblong-lanceolate, acute. Flowers

yellowish-pink to bluish pink in distant pairs along a filiform, leaf opposed rachis. Calyx teeth equalling the first joint of pod. Pods 4-6 jointed, compressed, sub-moniliform, reticulately veined. Scarce.

JODHPUR: along Jaisalmer road near Tole-sar, *A. N. Singh* 4350.

Flowers & fruits: August.

Eleocharis congesta D. Don, Prod. Fl. Nep. 41. 1825; Clarke, in Hook. f., Fl. Br. Ind. 6: 630. 1894.

Erect tufted herb, nearly 10 cm tall, in marshy places. Stem striate. Sheath appressed, purplish at base. Spikelets ovoid, solitary, terminal. Glumes membranous, ovate, lanceolate, 1-nerved. Bristles brown, scabrid. Nuts trigonous. Common.

JODHPUR: Banganga river bed, near Bilara, *A. N. Singh* 3523.

Flowers & fruits: February.

Samolus valerandi Linn., Sp. Pl. 171. 1753; Hook. f., Fl. Br. Ind. 3: 506. 1882; Duthie,

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Fl. Up. Gang. Pl. 2: 7. 1911.

A glabrous annual herb in moist shady places, in rocky soil. Stem erect (rarely horizontal), upto 50 cm tall. Leaves rosulate, spatulate, acuminate at base, alternate spatulate to obovate-elliptic above. Flowers white, in axillary and terminal racemes, pedicelled. Pedicels geniculate at the insertion of a small bract at or above the middle. Calyx tube hemispheric, half adnate to ovary, 5-toothed. Corolla lobes imbricate. Stamens 5, alternating with scaly staminodes. Ovary globose, half inferior. Scarce.

BILWARA: Mandalgarh forests along Bijolia Road, *A. N. Singh* 7164.

Flowers & fruits: February.

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A. N. SINGH

30. NOTE ON THE OCCURRENCE OF *AGROSTIS NERVOSA* NEES EX TRIN. IN WESTERN HIMALAYA

During a collection tour of Rudranath bugyal (an alpine-meadow) of District Chamoli (North Garhwal) U.P. an interesting grass was obtained. It was identified as *Agrostis nervosa* Nees ex Trin. syn. *A. Clarkii* Hook. f.

Hook. f.; in Fl. Br. Ind. 7: 257 (1896) mentioned the occurrence of this grass from North Western Himalaya without precise locality.

Bor, N. L. in Kew Bull. (1954) 459-60, states, "This grass is exceedingly common in

Sikkim but strangely enough the Type comes from Western Himalaya and is the only gathering from the areas".

Bor (1960) in Grasses Burma, Ceylon, India and Pakistan: 388 does not indicate its occurrence in Western Himalaya.

This note now presents the precise locality of this grass in Western Himalaya, i.e. Rudranath bugyal, alt. 4000 m. District Chamoli (North Garhwal), U.P., where it is gregarious in open grassy hill slopes of alpine pastures.